



AMENDED TRANSLATION - FOR EXAMINATION

CLAIMS

- 1- A method for resetting metering of the length of reels of yarn, wherein:
- the rotation speed obtained with the empty reel is recorded beforehand;
 - 5 - after start-up, the rotation speed of the reel that is being formed is measured, this speed corresponds to the maximum speed reached at the end of the start-up acceleration phase and at the start of the gradual slowdown phase after the winding phase and this speed is compared to that obtained when the reel was empty;
 - 10 - if the rotation speed measured after start-up is substantially equal to (or greater than) the rotation speed obtained when the reel was empty, length metering is then reset;
 - if the speed after start-up is substantially less than the rotation speed that corresponds to an empty tube, metering is resumed from the point
 - 15 where it stopped.
- 2- A method as claimed in claim 1, wherein reinitialization of metering is a simple zero reset.
- 20 -3- A method as claimed in claim 1, wherein, to obtain improved metering accuracy, this reset involves resetting the counter to the winding length recorded during the acceleration phase, estimated, for example, by counting the number of revolutions that the tube actually made during this phase.
- 25 -4- A method as claimed in any of claims 1 to 3, wherein the rotation speed is measured continuously or at regular intervals during production.





AMENDED TRANSLATION - FOR EXAMINATION

- 5- A method as claimed in claim 4, wherein:
- the rotation speed measured immediately before a production stoppage is stored.
 - the rotation speed after restarting is measured and compared firstly to the rotation speed obtained with an empty reel and secondly to the speed stored immediately before the stoppage, so that:
 - if the rotation speed measured after restarting is substantially equal to the rotation speed obtained when the reel was empty, length metering is reset;
 - if the rotation speed measured after restarting is substantially equal to the rotation speed obtained immediately before the stoppage, length metering is not reset and metering resumes from the point at which it stopped;
 - if the rotation speed measured after restarting is less than the rotation speed obtained when the reel was empty and greater than the rotation speed obtained immediately before the stoppage, length metering is not reset and metering resumes from the point at which it stopped and an alarm is triggered;
- 6- A method as claimed in claim 5, wherein if the rotation speed measured immediately before the stoppage is substantially equal to the rotation speed obtained when the reel was empty, length metering is reset and an alarm is triggered.
- 7- A method as claimed in any of claims 1 to 6, wherein the rotation speed equivalent to the final meterage of a correctly wound reel and/or the rotation speed equivalent to the maximum diameter of the reel accommodated by the winding system is recorded beforehand.





AMENDED TRANSLATION - FOR EXAMINATION

- 8- A method as claimed in claim 7, wherein the rotation speed is measured continuously or at regular intervals during production.
- 9- A method as claimed in claim 8, wherein the rotation speed measured immediately before a production stoppage is stored so that:
- if the rotation speed measured after restarting and/or during production is substantially equal to or less than the rotation speed equivalent to the final meterage of a correctly wound reel and/or the rotation speed equivalent to the maximum diameter of the reel accommodated by the winding system, winding is interrupted and an alarm is triggered.
- 10- A method as claimed in claim 8, wherein the rotation speed equivalent to the final meterage of a correctly wound reel is recorded beforehand so that, if the rotation speed of the reel immediately before stoppage on reaching the programmed meterage differs from the rotation speed equivalent to the final meterage, an alarm is triggered.
- 11- A method as claimed in claim 10, wherein a table containing the rotation speed as a function of the meterage reached for a correctly wound reel is recorded beforehand, so that, if the rotation speed measured at any time during winding differs from the rotation speed equivalent to the meterage reached at the instant in question for a correctly wound reel, an alarm is triggered.
- 12- A device for using the method as claimed in any of claims 1 to 11, wherein it comprises at least one means capable of measuring the rotation speed of the reel by outputting one or more pulses per revolution so that the





AMENDED TRANSLATION - FOR EXAMINATION

rotation speed can be deduced from the frequency of said pulses or from the time that elapses between said pulses.

5 -13- A device as claimed in claim 12, wherein it comprises means capable of performing various operations and triggering alarms, especially in the form of one or more visible and/or audible signals.

10 -14- A device as claimed in claim 13, wherein these means are linked to a display indicating the causes of the alarm.

-15- A device as claimed in claim 13, wherein these means are a computer, an automaton, a printed circuit board or a logic circuit, possibly combined or integrated with other means of processing and/or diagnostics.

15

20

25

